Third Quarter 2023
Financial Results

November 2, 2023
Forward-looking statements and disclaimer

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including statements regarding: Moderna’s expected revenues in 2023 and 2024; Moderna’s ability to launch multiple products in 2024 and 2025 and return to sales growth in 2025; Moderna’s future cost of sales; Moderna’s expectation to break even in 2026; the sufficiency of Moderna’s current cash balances to fund future plans, and Moderna’s plans not to raise additional equity; the 2023 U.S. vaccination rate; Spikevax’s market share and the ability to continue to gain market share; Moderna’s ability to compete in the broader respiratory vaccine commercial market; the anticipated profitability of Moderna’s COVID-19 franchise for 2024 and beyond; Moderna’s anticipated launches of its RSV vaccine in 2024 with a potential best-in-class profile and its COVID + flu combination vaccine in 2025; Moderna’s 2023 through 2025 financial framework; the potential for Moderna to launch up to 15 products in the next five years; the anticipated benefits of combination vaccines; the anticipated initial regulatory approval for mRNA-1083 in 2025; the expectation that Moderna will provide additional data from its Phase 2 INT study in the fourth quarter of 2023; Moderna’s and Merck’s Phase 3 study of mRNA-4157 in melanoma patients and expected commencement of a Phase 3 trial in NSCLC patients; and Moderna’s and Merck’s plans to expand the INT development program to additional tumor types. In some cases, forward-looking statements can be identified by terminology such as “will,” “may,” “should,” “could,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” “continue,” or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. The forward-looking statements in this presentation are neither promises nor guarantees, and you should not place undue reliance on these forward-looking statements because they involve known and unknown risks, uncertainties, and other factors, many of which are beyond Moderna’s control and which could cause actual results to differ materially from those expressed or implied by these forward-looking statements. These risks, uncertainties, and other factors include, among others, those risks and uncertainties described under the heading “Risk Factors” in Moderna’s Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the U.S. Securities and Exchange Commission (SEC), and in subsequent filings made by Moderna with the SEC, which are available on the SEC’s website at www.sec.gov. Except as required by law, Moderna disclaims any intention or responsibility for updating or revising any forward-looking statements contained in this presentation in the event of new information, future developments or otherwise. These forward-looking statements are based on Moderna’s current expectations and speak only as of the date of this presentation. Financial figures in this presentation as of, and for the quarterly periods ended, September 30, 2023, and September 30, 2022, are unaudited.
3Q23 earnings call agenda

Business Review
Stéphane Bancel, CEO

Commercial Market
Arpa Garay, CCO

Financials
Jamey Mock, CFO

R&D/Clinical Programs
Stephen Hoge, M.D., President

Looking Forward
Stéphane Bancel, CEO
3Q23 and 2023 highlights

COVID product (Spikevax) sales

3Q23
$1.8B

2023 updated outlook
at least
$6 billion
assumes ~50 million doses in the total U.S. market

U.S. market share

Increasing Spikevax share in the current season¹

<table>
<thead>
<tr>
<th>2022</th>
<th>2023 Season to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>36%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Pandemic to endemic cost resizing

Manufacturing cost reduction
Resizing manufacturing footprint to accelerate gross margin expansion toward longer-term target of 75-80%

Resizing resulting in charges of $1.6 billion
($1.4 billion in 3Q, and expected $0.2 in 4Q)

1. 2023 fall season share to date as-of October 20; IQVIA data; 2022 September-December share of bivalent doses: CDC data
3Q23 earnings call agenda

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3Q23 Spikevax sales of $1.8B; updating sales outlook to at least $6B for 2023

Spikevax sales through 3Q23

Q1’23: $1.8B  
Q2’23: $0.3B  
3Q’23: $0.9B  
1Q23-3Q23: $3.9B

4Q and FY 2023 outlook

International

- Expected 4Q sales: $1.1B  
- Contracts not dependent on vaccination rates

U.S.

- Expected 4Q sales: At least $1B  
- Assumes ~50 million doses in the total U.S. market

Expected 2023 sales

- At least $6B
Moderna’s U.S. COVID market share in 2023 Fall season to date is higher than market share in 2022

**Moderna weekly market share (%) of administered doses**

- **42%** on 9/22
- **39%** on 9/29
- **44%** on 10/6
- **48%** on 10/13
- **51%** on 10/20

**45%** cumulative market share for 2023 season to date

**36%** Moderna market share in 2022

Based on information licensed from IQVIA; IQVIA RAPID Weekly Audit for September/October 2023, reflecting estimates of real-world activity. All rights reserved.
Weekly vaccination trends in 2023 indicate similarly sized market to 2022, despite later launch

Cumulative vaccinations
Total U.S. market (millions)
L+X = weeks past launch date

<table>
<thead>
<tr>
<th>L</th>
<th>L+1</th>
<th>L+2</th>
<th>L+3</th>
<th>L+4</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/22</td>
<td>9/29</td>
<td>10/6</td>
<td>10/13</td>
<td>10/20</td>
</tr>
<tr>
<td>1.4</td>
<td>1.8</td>
<td>4.0</td>
<td>6.9</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.8</td>
<td>8.3</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14.8</td>
</tr>
</tbody>
</table>

2023 IQVIA data
2022 IQVIA data

IQVIA data represents U.S. retail pharmacy channel only

2023 COVID vaccines were launched two weeks later than in 2022

On a launch-adjusted basis, weekly trends show higher vaccinations versus last year

Retail pharmacy channel is typically the largest segment

Based on information licensed from IQVIA: IQVIA RAPID Weekly Audit for September/October 2023, reflecting estimates of real-world activity. All rights reserved.
Retail pharmacy defined by IQVIA as: pharmacy, long-term care, mail order
Similar to 2022, we expect the non-retail segment to increase in 2023 as the season progresses

We expect retail/non-retail mix for full year 2023 to evolve as the season progresses

Vaccine uptake in the non-retail channel is generally later in the season

Distributors have recently increased shipments to the non-retail channel

We expect non-retail as a percentage of market to grow between now and year end

Expect Moderna market share in non-retail segment to be similar to our retail pharmacy market share

Non-retail defined by IQVIA as: hospital, integrated delivery networks, CDC, physician offices, etc. Based on information licensed from IQVIA: IQVIA RAPID Weekly Audit for September-December 2022 and September-October 2023, reflecting estimates of real-world activity. All rights reserved. CDC data from: https://covid.cdc.gov/covid-data-tracker/#/vaccinations_vacc-people-booster-percent-pop5
We are using a multi-pronged approach to increase sense of urgency to get vaccinated

- Continuing to activate the medical community to proactively recommend the updated COVID vaccine
- Supporting retail pharmacies and physician clinics with patient education and encouraging vaccinations throughout the holiday season
- Engaging the consumer with a focus on adults who receive their annual flu shots. Educating consumers who have been infected this summer about the importance of vaccination in November and December
- Amplifying voice of advocacy groups and major professional organizations to create credible messaging on need for updated COVID vaccine
We expect at least $6B in Spikevax sales this year, supported by U.S. market

Moderna share expected to be higher than 2022, consistent across retail and non-retail channels

Vaccine administrations in the retail channel tracking ahead of 2022 on a launch-adjusted basis, signaling strong demand

Non-retail channel is expected to increase as a percentage of the market; vaccination campaigns just beginning

We are increasing promotional efforts across all channels this year in Nov. and Dec.
RSV: Best-in-class product profile

Vaccine efficacy against RSV-LRTD ≥2 symptoms was generally consistent in patients regardless of co-morbidities¹

83.7% efficacy in overall study population

88.4% efficacy in participants with co-morbidities

Well-established safety and tolerability profile for mRNA vaccine technology

- Over 1 billion COVID-19 doses using same mRNA technology
- Most solicited adverse reactions were mild to moderate¹,²
- No cases of Guillain-Barré Syndrome (GBS) have been reported with mRNA-1345 in Phase 3 RSV trial²

Ease of administration

- Single-dose prefilled syringe
- Only ready-to-use formulation, saving time and reducing administration errors³,⁴

¹ Based on RSV LRTD with ≥2 symptoms; RSVVW data
² As of April 30, 2023
³ www.ncbi.nlm.nih.gov/pmc/articles/PMC7846520/
⁴ www.ncbi.nlm.nih.gov/pmc/articles/PMC7913196/
RSV: Anticipating a successful launch in 2024

Positioned for a strong launch

Observing strong consumer awareness and demand in the RSV market in 2023

Strong clinical profile and ready to use pre-filled syringes (PFS) are competitive differentiators
- Robust demand for PFS in pharmacies for COVID vaccines
- Pharmacy labor shortages amplifying need for ready to use presentations

Well-positioned with commercial team and infrastructure in place for our second respiratory vaccine launch
3Q23 earnings call agenda

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**Looking Forward**  
Stéphane Bancel, CEO
Third quarter 2023 financial results

In $ millions, except per share amounts

<table>
<thead>
<tr>
<th></th>
<th>3Q 2023</th>
<th>3Q 2022</th>
<th>Change (3Q’23 vs. 3Q’22)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net product sales</strong></td>
<td>$1,757</td>
<td>$3,120</td>
<td>$(1,363) (44)%</td>
</tr>
<tr>
<td><strong>Other revenue</strong>¹</td>
<td>74</td>
<td>244</td>
<td>(170) (70)%</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td>1,831</td>
<td>3,364</td>
<td>(1,533) (46)%</td>
</tr>
<tr>
<td><strong>Cost of sales</strong></td>
<td>2,241</td>
<td>1,100</td>
<td>1,141 104 %</td>
</tr>
<tr>
<td><strong>Research and development</strong></td>
<td>1,160</td>
<td>820</td>
<td>340  41 %</td>
</tr>
<tr>
<td><strong>Selling, general and administrative</strong></td>
<td>442</td>
<td>278</td>
<td>164  59 %</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>3,843</td>
<td>2,198</td>
<td>1,645  75 %</td>
</tr>
<tr>
<td><strong>(Loss) income from operations</strong></td>
<td>(2,012)</td>
<td>1,166</td>
<td>(3,178) (273)%</td>
</tr>
<tr>
<td><strong>Other income, net</strong></td>
<td>54</td>
<td>51</td>
<td>3  6 %</td>
</tr>
<tr>
<td><strong>Provision for income taxes</strong></td>
<td>1,672</td>
<td>174</td>
<td>1,498 861 %</td>
</tr>
<tr>
<td><strong>Net (loss) income</strong></td>
<td>$ (3,630)</td>
<td>$1,043</td>
<td>$ (4,673) (448)%</td>
</tr>
<tr>
<td><strong>(Loss) earnings per share – Diluted</strong></td>
<td>$ (9.53)</td>
<td>$ 2.53</td>
<td>$ (12.06) (477)%</td>
</tr>
<tr>
<td><strong>Weighted average shares – Diluted</strong>²</td>
<td>381</td>
<td>412</td>
<td>(31) (8)%</td>
</tr>
<tr>
<td><strong>Weighted average shares – Basic</strong>²</td>
<td>381</td>
<td>390</td>
<td>(9) (2)%</td>
</tr>
<tr>
<td><strong>Effective tax rate</strong></td>
<td>(85)%</td>
<td>14 %</td>
<td></td>
</tr>
</tbody>
</table>

¹Includes grant revenue and collaboration revenue

²We generated a net loss in Q3 2023, therefore the basic and diluted weighted average shares calculation was the same

In $ billions

<table>
<thead>
<tr>
<th></th>
<th>9/30/2023</th>
<th>6/30/2023</th>
<th>Change (9/30 vs. 6/30)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash, cash equivalents and investments</strong></td>
<td>$ 12.8</td>
<td>$ 14.6</td>
<td>$(1.8) (12)%</td>
</tr>
</tbody>
</table>
Total 2023 cost of sales expected to be $5 billion, including $1.6 billion of charges from proactive resizing efforts

Before resizing charges of $1.6 billion, annual cost of sales would be at lower end of previous guidance range of $3.5-4.0 billion

$1.6 billion increase in cost of sales driven by proactive resizing-related charges ($0.9 billion non-cash; $0.7 billion cash)

2-year cash payback period and cumulative net cash benefit estimated at ~$1 billion by 2029

1 Unit driven manufacturing cost, distribution cost, royalties

2 Inventory write-downs, CMO-related charges for unutilized manufacturing capacity and wind-down costs, and loss on firm purchase commitments and related cancellation fees

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# Respiratory cost of sales framework

Resizing expected to drive more predictable cost of sales going forward

## Respiratory cost of sales % at different sales levels

<table>
<thead>
<tr>
<th>Sales ($ billions)</th>
<th>Cost of sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>-35%</td>
</tr>
<tr>
<td>6</td>
<td>-30%</td>
</tr>
<tr>
<td>8</td>
<td>-25%</td>
</tr>
<tr>
<td>10</td>
<td>-20%</td>
</tr>
</tbody>
</table>

Write-downs / charges expected to be less than 10% of sales in 2024 and beyond (vs. 74% YTD)

Capacity better-positioned to scale with volume

Forecasting expected to improve in endemic setting
### Q3 2023 financial results with and without charges

<table>
<thead>
<tr>
<th></th>
<th>GAAP</th>
<th>Manufacturing resizing and tax related charges</th>
<th>Non-GAAP 3Q 2023 w/o charges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net product sales</strong></td>
<td>1,757</td>
<td></td>
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<td>1,831</td>
<td>(1,416)</td>
<td>825</td>
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<tr>
<td></td>
<td>2,241</td>
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<td><strong>Total operating expenses</strong></td>
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<td></td>
<td>2,427</td>
</tr>
<tr>
<td><strong>(Loss) income from operations</strong></td>
<td>(2,012)</td>
<td></td>
<td>(596)</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td></td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>1,672</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td><strong>Net (loss) income</strong></td>
<td>(3,630)</td>
<td></td>
<td>(549)</td>
</tr>
</tbody>
</table>

1. Tax effect of resizing charges is immaterial

#### Q3 Manufacturing Resizing charges:
- $0.9 billion inventory write-downs
- $0.5 billion CMO related wind-down cost and cancellations charges for raw materials

#### Q3 tax charge
- $1.7 billion valuation allowance on deferred tax assets
### 2023 updated financial framework

**Expectations for full year 2023**

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
</table>
| **Sales**         | • Reduction of upper range informed by U.S. vaccination trends in recent weeks  
                   • COVID-19 sales of at least $6 billion, assuming U.S. vaccination rate trends consistent with Fall 2022 period (previously: $6-8 billion based on U.S. market of 50-100 million doses) |
| **Cost of sales** | • Cost of sales at ~$5 billion (previously: $3.5-4.0 billion), includes resizing charges of ~$1.6 billion                                 |
| **R&D & SG&A**    | • R&D and SG&A expenses of ~$6.3 billion, with ~$4.8 billion in R&D (previously: R&D and SG&A of ~$6 billion, with R&D ~$4.5 billion)        |
| **Tax**           | • Tax expense of ~$0.8-1.0 billion (previously: benefit of ~$0.7-1.0 billion), driven by an increase in valuation allowance on deferred tax assets |
| **Capital Expenditures** | • Capital expenditures of ~$0.9 billion (previously: $1.0 billion)                                                                 |

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We expect our COVID franchise to be profitable in 2024 and beyond.

We plan to invest in our late-stage pipeline to drive significant organic sales growth.

We will be disciplined and will adjust our R&D and SG&A investment based upon our sales performance.

We expect to break even in 2026 through product launches and disciplined investment.

Our current balance sheet is more than sufficient to fund our plans without raising equity.
Early thoughts on 2024 and 2025 product sales

Projecting approximately $4 billion mostly in 2H 2024

<table>
<thead>
<tr>
<th></th>
<th>COVID APAs (ex-US)</th>
<th>COVID US</th>
<th>RSV + Int’l COVID</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>$4</td>
<td>$2</td>
<td>-</td>
<td>At least $6B</td>
</tr>
<tr>
<td>2024</td>
<td>$1</td>
<td>$2+</td>
<td>~$1</td>
<td>Approximately $4B</td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td></td>
<td></td>
<td>Expect to return to growth</td>
</tr>
</tbody>
</table>

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## 2024 and 2025: early thoughts on overall financial framework

<table>
<thead>
<tr>
<th>Expectations for full year</th>
<th>2024</th>
<th>Expectations for full year</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>~$4 billion</td>
<td>Return to growth</td>
<td></td>
</tr>
<tr>
<td><strong>Cost of Sales</strong></td>
<td>~35% of product sales</td>
<td>Improve with higher sales</td>
<td></td>
</tr>
<tr>
<td><strong>R&amp;D</strong></td>
<td>~$4.5 billion</td>
<td>Flat to down, with ability to flex</td>
<td></td>
</tr>
<tr>
<td><strong>SG&amp;A</strong></td>
<td>~$1.3 billion</td>
<td>Flat to down, with ability to flex</td>
<td></td>
</tr>
<tr>
<td><strong>Tax</strong></td>
<td>Negligible</td>
<td>Negligible</td>
<td></td>
</tr>
<tr>
<td><strong>Capital expenditures</strong></td>
<td>~$0.9 billion</td>
<td>Materially down</td>
<td>(UK, Canada, Australia sites completed early ‘25)</td>
</tr>
<tr>
<td><strong>COVID operating income (excluding R&amp;D)</strong></td>
<td>~$1 billion</td>
<td>Increasing</td>
<td></td>
</tr>
<tr>
<td><strong>Ending cash balance</strong></td>
<td>~$9 billion</td>
<td>$6-7 billion</td>
<td></td>
</tr>
</tbody>
</table>
3Q23 earnings call agenda

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Stephen Hoge, M.D., President

**Looking Forward**  
Stéphane Bancel, CEO
We will continue to deliver great impact with our mRNA medicines
Anticipating up to 15 launches in the next 5 years¹

<table>
<thead>
<tr>
<th>Respiratory vaccines</th>
<th>Latent/other vaccines</th>
<th>Oncology</th>
<th>Rare disease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>by 2025</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RSV (older adults)</td>
<td>Seasonal Flu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mRNA-1345</td>
<td>mRNA-1010</td>
<td></td>
<td></td>
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<tr>
<td>Flu/COVID mRNA-1083</td>
<td>NextGen COVID</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>by 2028</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flu/COVID/RSV</td>
<td>RSV/hMPV (older adults)</td>
<td></td>
<td>MMA mRNA-3705</td>
</tr>
<tr>
<td>NextGen mRNA-1345</td>
<td>mRNA-1365</td>
<td>INT (adjvant melanoma) mRNA-4157</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>PKU mRNA-3210</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>INT (undisclosed indication) mRNA-4157</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EBV (IM) mRNA-1189</td>
<td>GSD1a mRNA-3745</td>
<td></td>
</tr>
<tr>
<td>RSV 2-18Y mRNA-1345</td>
<td>Pandemic Flu</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>mRNA-1018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NextGen Flu mRNA-1011/-1020</td>
<td>Endemic hCOV mRNA-1287</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>LSM mRNA-1468</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>HSV mRNA-1608</td>
<td></td>
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</tbody>
</table>

¹ Subject to positive clinical data and regulatory discussions/approvals
² Subject to future regulatory discussions, there may be potential for accelerated or conditional approvals in some markets
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Respiratory vaccines pipeline overview

mRNA-1083 Phase 3 trial dosing participants

Commercial and Phase 3 programs

- **COVID-19** (mRNA-1273.222/.815)
  - Ph. 1
  - Ph. 2
  - Ph. 3
  - Comm.

- **Older adults RSV** (mRNA-1345)
  - Ph. 1
  - Ph. 2
  - Ph. 3
  - Comm.

- **Flu** (mRNA-1010)
  - Ph. 1
  - Ph. 2
  - Ph. 3
  - Comm.

Next-gen programs

- **COVID-19 next-gen booster** (mRNA-1283)
  - Ph. 1
  - Ph. 2
  - Ph. 3
  - Comm.

- **Flu** (mRNA-1011/-1012)
  - Ph. 1
  - Ph. 2
  - Ph. 3
  - Comm.

Combination programs

- **COVID-19 + flu** (mRNA-1083)
  - Ph. 1
  - Ph. 2
  - Ph. 3
  - Comm.

- **COVID-19 + flu + RSV** (mRNA-1230)
  - Ph. 1
  - Ph. 2
  - Ph. 3
  - Comm.

- **RSV + flu** (mRNA-1045)
  - Ph. 1
  - Ph. 2
  - Ph. 3
  - Comm.

- **RSV + hMPV** (mRNA-1365)
  - Ph. 1
  - Ph. 2
  - Ph. 3
  - Comm.

mRNA-1083 Phase 3 trial dosing participants
mRNA-1083 (flu + COVID-19 combination vaccine) Phase 3 trial is now dosing participants

mRNA-1083 has Fast Track designation from FDA

**Design**
Randomized, stratified, observer-blind, active-control study to evaluate the immunogenicity, safety and reactogenicity of mRNA-1083

**Number of participants**
8,000 healthy adults ≥ 50 years old

**Vaccination schedule**
mRNA-1083 and placebo or age recommend quadrivalent influenza vaccination and COVID-19 vaccine administered as two IM injections on day 1

**Duration**
Study participants will be followed for 6 months after study injection

**Site location**
Northern Hemisphere (United States and Canada)
Latent & other vaccines

Phase 3 CMVictory study is fully enrolled including adolescent cohorts

Phase 3 programs

CMV (mRNA-1647)

Early clinical programs

EBV (mRNA-1189/-1195)

HIV (mRNA-1644/-1574)

VZV (mRNA-1468)

HSV (mRNA-1608)

Norovirus (mRNA-1403/-1405)

Lyme (mRNA-1975/-1982)
mRNA therapeutics

INT enrolling patients in Phase 3 adjuvant melanoma study; adjuvant NSCLC Phase 3 to start imminently

**Immuno-oncology**

**Individualized Neoantigen Therapy (INT)**
(mRNA-4157)

- PC
- Ph. 1
- Ph. 2
- Ph. 3
- Comm.

**Adjuvant melanoma**

**Checkpoint vaccine**
(mRNA-4359)

- PC
- Ph. 1
- Ph. 2
- Ph. 3
- Comm.

**Triplet**
(mRNA-2752)

- PC
- Ph. 1
- Ph. 2
- Ph. 3
- Comm.

**KRAS**
(mRNA-5671)

**Cardiovascular**

**Relaxin**
(mRNA-0184)

- PC
- Ph. 1
- Ph. 2
- Ph. 3
- Comm.

**Autoimmune**

**PD-L1**
(mRNA-6981)

- PC
- Ph. 1
- Ph. 2
- Ph. 3
- Comm.

**Rare Disease**

**PA**
(mRNA-3927)

- PC
- Ph. 1
- Ph. 2
- Ph. 3
- Comm.

**MMA**
(mRNA-3705)

- PC
- Ph. 1
- Ph. 2
- Ph. 3
- Comm.

**GSD1a**
(mRNA-3745)

- PC
- Ph. 1
- Ph. 2
- Ph. 3
- Comm.

**CF**
(mRNA-3692 / VX-522)

- PC
- Ph. 1
- Ph. 2
- Ph. 3
- Comm.

**OTC, PKU, CN-1**
(mRNA-3139/3210/3351)

- PC
- Ph. 1
- Ph. 2
- Ph. 3
- Comm.
INT: NSCLC Phase 3 trial to start imminently

Primary endpoint is disease free survival compared to pembrolizumab

Randomized, double-blind placebo and active comparator controlled, INT + pembrolizumab (KEYTRUDA®) vs. placebo + pembrolizumab (1:1)

Resected non-small cell lung cancer (NSCLC) patients: stage II, IIIA, IIIB previously treated with adjuvant chemotherapy

Primary endpoint: disease free survival (DFS)

Secondary endpoints: Overall-Survival (OS), Distant Metastasis-Free Survival (DMFS), Safety, patient reported outcomes (PRO)

Number of patients: ~868

NCT06077760
3Q23 earnings call agenda

Business Review
Stéphane Bancel, CEO

Commercial Market
Arpa Garay, CCO

Financials
Jamey Mock, CFO

R&D/Clinical Programs
Stephen Hoge, M.D., President

Looking Forward
Stéphane Bancel, CEO
Our focus for 2024 and 2025 to drive sales growth and profitability

Commercial execution
- Market share gains of COVID in the US demonstrate that we can compete in the commercial setting
- The team is focused on launching RSV
- By 2025, we anticipate 4 respiratory vaccine products launched

Disciplined investment
- Recent resizing efforts aimed at making COVID product line profitable beginning in 2024; multiple opportunities to drive continuous improvements in manufacturing
- We will be disciplined in our investments and will adjust our R&D and SG&A investments based upon our sales performance

Executing our late stage pipeline
- We will continue to deliver on our pipeline:
  - 6 Phase 3 studies
    - Respiratory: RSV (mRNA-1345), flu (mRNA-1010), COVID (mRNA-1283), flu + COVID (mRNA-1083)
    - Latent: CMV
    - Oncology: INT in melanoma
Anticipating up to 15 launches over the next 5 years

<table>
<thead>
<tr>
<th>Respiratory vaccines</th>
<th>Latent/other vaccines</th>
<th>Oncology</th>
<th>Rare disease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>by 2025</strong></td>
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<tr>
<td>RSV</td>
<td>Seasonal Flu</td>
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<tr>
<td>(older adults)</td>
<td>mRNA-1345</td>
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<tr>
<td>Flu/COVID</td>
<td>NextGen COVID</td>
<td></td>
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<tr>
<td>mRNA-1083</td>
<td>mRNA-1283</td>
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<tr>
<td><strong>by 2028</strong></td>
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<tr>
<td>Flu/COVID/RSV</td>
<td>RSV/hMPV</td>
<td>INT</td>
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<tr>
<td>NextGen</td>
<td>(older adults)</td>
<td>(adjvant melanoma)</td>
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</tr>
<tr>
<td>mRNA-1345</td>
<td>mRNA-1365</td>
<td>mRNA-4157</td>
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<tr>
<td>RSV</td>
<td>Pandemic Flu</td>
<td>MMA</td>
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<tr>
<td>2-18Y</td>
<td>mRNA-1018</td>
<td>mRNA-3705</td>
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<tr>
<td>mRNA-1345</td>
<td>Endemic hCOV</td>
<td>PA</td>
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<tr>
<td>mRNA-1011/-1020</td>
<td>mRNA-1287</td>
<td>mRNA-3927</td>
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<tr>
<td>NextGen Flu</td>
<td>CMV</td>
<td>INT</td>
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<tr>
<td>mRNA-1010</td>
<td>mRNA-1647</td>
<td>(undisclosed indication)</td>
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<td></td>
<td></td>
<td>mRNA-4157</td>
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| Note: Subject to positive clinical data and regulatory discussions/approvals
1 Subject to future regulatory discussions, there may be potential for accelerated or conditional approvals in some markets
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Our Mission

Deliver the greatest possible impact to people through mRNA medicines.
Thank you

Q&A
### Moderna’s Respiratory Vaccines (Pipeline 1/3)

<table>
<thead>
<tr>
<th>Modality</th>
<th>Program</th>
<th>ID #</th>
<th>Preclinical development</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Commercial</th>
<th>Moderna rights</th>
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<tbody>
<tr>
<td></td>
<td>mRNA-1283</td>
<td>Next generation (2-5 °C)</td>
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<td>mRNA-1030</td>
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<tr>
<td>Infectious disease vaccines</td>
<td>Flu vaccine</td>
<td>mRNA-1083</td>
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<tr>
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<td>Flu + COVID vaccine</td>
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<td>Flu + RSV vaccine</td>
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<td></td>
<td>Flu + COVID + RSV vaccine</td>
<td>mRNA-1230</td>
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<td></td>
<td>Flu + RSV vaccine</td>
<td>mRNA-1045</td>
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<tr>
<td>RSV + hMPV vaccine</td>
<td>mRNA-1365</td>
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<tr>
<td>Pediatric RSV vaccine</td>
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<td>Phase 1</td>
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<td>Moderna rights</td>
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<td>Latent</td>
<td>CMV vaccine</td>
<td>mRNA-1647</td>
<td>Preclinical development</td>
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<td>EBV vaccine (to prevent infectious mononucleosis)</td>
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<td>EBV vaccine (to address EBV sequelae)</td>
<td>mRNA-1195</td>
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<td>VZV vaccine</td>
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<td>HIV vaccines</td>
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<td>mRNA-1574</td>
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<td>Worldwide</td>
<td>IAVI/others funded</td>
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<td>Infectious disease vaccines</td>
<td>Norovirus vaccines</td>
<td>mRNA-1403</td>
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<td>mRNA-1405</td>
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<td>Worldwide</td>
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<td>Enteric</td>
<td>Lyme vaccines</td>
<td>mRNA-1975</td>
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<td></td>
<td></td>
<td>mRNA-1982</td>
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<tr>
<td>Bacterial</td>
<td>Zika vaccine</td>
<td>mRNA-1893</td>
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<td>Worldwide</td>
<td>BARDA funded</td>
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<td>Public health</td>
<td>Nipah vaccine</td>
<td>mRNA-1215</td>
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<td>Worldwide</td>
<td>NIH funded</td>
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</table>
## Moderna’s Therapeutics (Pipeline 3/3)

<table>
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<tr>
<th>Modality</th>
<th>Program</th>
<th>ID #</th>
<th>Preclinical development</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Commercial</th>
<th>Moderna rights</th>
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</thead>
<tbody>
<tr>
<td><strong>Systemic secreted &amp; cell surface therapeutics</strong></td>
<td>Relaxin Heart failure</td>
<td>mRNA-0184</td>
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<tr>
<td></td>
<td>PD-L1 Autoimmune hepatitis</td>
<td>mRNA-6981</td>
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<td>Worldwide</td>
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<tr>
<td><strong>Cancer vaccines &amp; therapeutics</strong></td>
<td>Individualized neoantigen therapy [INT] – adjuvant melanoma</td>
<td>mRNA-4157</td>
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<td>50-50 global profit sharing with Merck</td>
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<td><strong>Intratumoral Immuno-oncology</strong></td>
<td>KRAS vaccine</td>
<td>mRNA-5671</td>
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<td>Checkpoint vaccine</td>
<td>mRNA-4359</td>
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<td></td>
<td>OX40L/IL-23/IL-36γ (Triplet) Solid tumors/lymphoma</td>
<td>mRNA-2752</td>
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<td>Worldwide</td>
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<tr>
<td><strong>Rare disease intracellular therapeutics</strong></td>
<td>Propionic acidemia (PA)</td>
<td>mRNA-3927</td>
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<tr>
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<td>Methylmalonic acidemia (MMA)</td>
<td>mRNA-3705</td>
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<td>Glycogen storage disease type 1a (GSD1α)</td>
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<td>Ornithine transcarbamylase deficiency (OTC)</td>
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<td><strong>Inhaled pulmonary therapeutics</strong></td>
<td>Phenylketonuria (PKU)</td>
<td>mRNA-3210</td>
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<td>Crigler-Najjar syndrome type 1 (CN-1)</td>
<td>mRNA-3351</td>
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<td>Provided to ILCM free of charge</td>
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<tr>
<td></td>
<td>Cystic fibrosis (CF)</td>
<td>mRNA-3692 / VX-522</td>
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<td>Vertex to pay milestones and royalties</td>
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Save the Date
Events in 2023

- Digital Investor Event
  November 8th

- ESG Day
  December 7th